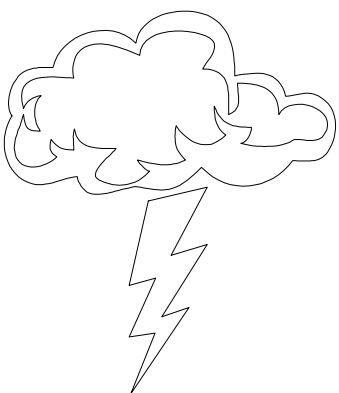


## Background — Thunderstorms and Lightning

### Emergency Information

Thunderstorms can bring heavy rains (which can cause flash flooding), strong winds, hail, lightning and tornados. In a severe thunderstorm, get inside a sturdy building and stay tuned to a battery-operated radio for weather information.



Lightning is a major threat during a thunderstorm. In the United States, between 75 to 100 Americans are hit and killed each year by lightning. If you are caught outdoors, avoid natural lightning rods such as tall, isolated trees in open areas or on hilltops, and metal objects such as wire fences, golf clubs and metal tools.

It is a myth that lightning never strikes twice in the same place. In fact, lightning will strike several times in the same place in the course of one discharge.

### Danger Zones

While thunderstorms and lightning can be found throughout the U.S., they are most likely to occur in the central and southern states. Florida has the highest number of thunderstorm days.

### What Is a Thunderstorm?

A thunderstorm forms when moisture combines with rapidly rising warm air and a force capable of lifting air such as a warm or cold front, a sea breeze or a mountain. All thunderstorms contain lightning. Thunderstorms may occur singly, in clusters or in lines. Thus it is possible for several thunderstorms to affect one location in the course of a few hours. A very severe weather event occurs when a single thunderstorm affects one location for a long time.

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### What Is Lightning?

Lightning is an electrical discharge that results from the buildup of positive and negative charges within a thunderstorm. When the buildup becomes strong enough, lightning appears as a "bolt." This flash of light usually occurs within the clouds or between the

clouds and the ground. A bolt of lightning reaches a temperature approaching 50,000 degrees Fahrenheit in a split second. The rapid heating and cooling of air near the lightning causes thunder.

## Help Your Community Get Ready

Media can raise awareness about thunderstorms and lightning by providing information to the community by:

- Publishing a special section in your local newspaper with emergency information about thunderstorms and lightning. Place special emphasis on what people should do if they are caught outside. Print the phone numbers of local emergency services offices, the American Red Cross, and hospitals.
- Interviewing officials with the U.S. Department of Agriculture about the Federal Crop Insurance Corporation.
- Periodically informing your community of local public warning systems.
- Having your meteorologist speak to elementary schools and youth groups about thunderstorms, lightning and hail.
- Interviewing a representative of the American Red Cross about giving first aid to people struck by lightning.

## Did You Know...

- At any given moment nearly 1,800 thunderstorms are in progress over the surface of the earth.
- On average, the U.S. gets 100,000 thunderstorms each year. Approximately 1,000 tornados develop from these storms.
- Large hail damages \$1 billion worth of property and crops.
- Lightning's electrical charge and intense heat can electrocute on contact, split trees, ignite fires and cause electrical failures.
- Most deaths from lightning occur on the East Coast. Many forest fires are started in the West as the lightning season coincides with the dry season there.
- Approximately 10,000 forest fires are started each year by lightning.
- Approximately \$100 million in annual losses result from forest and building fires caused by lightning.
- Straight-line winds exceeding 100 mph are responsible for most thunderstorm damage.